

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
7 July 2005 (07.07.2005)

PCT

(10) International Publication Number  
**WO 2005/062360 A1**

(51) International Patent Classification<sup>7</sup>: **H01L 21/3065**

(21) International Application Number:  
PCT/KR2004/003387

(22) International Filing Date:  
22 December 2004 (22.12.2004)

(25) Filing Language: Korean

(26) Publication Language: English

(30) Priority Data:  
10-2003-0094412  
22 December 2003 (22.12.2003) KR

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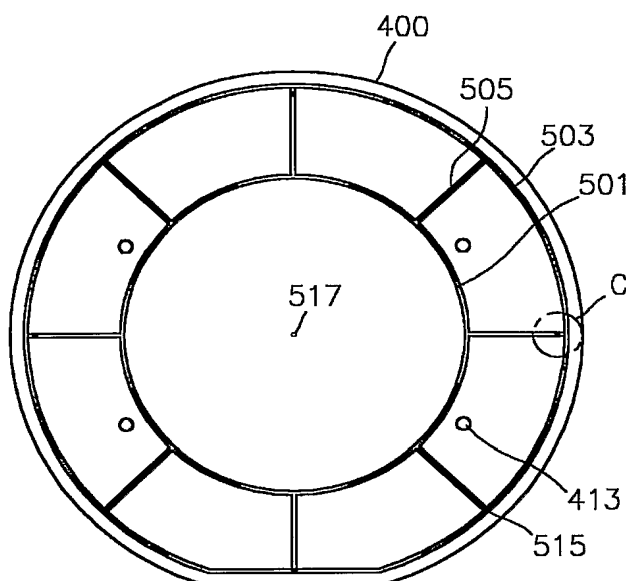
(81) Designated States (unless otherwise indicated, for every  
kind of national protection available): AE, AG, AL, AM,  
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,  
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,  
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,  
KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG,  
MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH,  
PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN,  
TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every  
kind of regional protection available): ARIPO (BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,  
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),  
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,  
FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO,  
SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN,  
GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

[Continued on next page]

(54) Title: ELECTROSTATIC CHUCK AND CHUCK BASE HAVING COOLING PATH FOR COOLING WAFER



(57) Abstract: Disclosed herein is an electrostatic chuck having a cooling channel formed at the surface thereof. The electrostatic chuck comprises a chuck base for supporting a wafer, a dielectric film mounted on the chuck base, the dielectric film having an electrode for supplying direct current voltage to provide an electrostatic force necessary to fix the wafer, the electrode being disposed in the dielectric film, and a cooling channel for supplying refrigerant to the dielectric film to control the temperature of the wafer. The cooling channel comprises at least two first cooling channel parts formed at the surface of the dielectric film corresponding to the edge part of the wafer such that the first cooling channel parts form concentric circles, second cooling channel parts formed at the surface of the dielectric film such that the first cooling channel parts are connected to each other through the second cooling channel parts, first through channels formed through the dielectric film for supplying the refrigerant to the first and second cooling channel parts, and a second through channel formed through the center of the dielectric film for supplying the refrigerant to the center of the wafer.

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— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

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